The Times and Register.

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Original.

CLINICAL REPORTS ON TRIONAL.

BY DR. F. A. A. BOUDEAU, OF PARIS.

(Continued from last number.)

6. INSOMNIA DUE TO VARIOUS CHRONIC AFFECTIONS.

Case XXIV. Eugene B., cook, 37 years old. Had undergone a laparotomy thirteen days before, for a fibroma, which the surgeons were not able to remove, and which has been the cause of a very profound anemia, from repeated metrorrhagias. For a month she has not had any continuous sleep. She falls into a doze from time to time, and then after a short nap will lie awake for an hour or more. No restlessness.

March 16. Took one gm. trional at 6 o'clock. Slept from 8 till 9 o'clock, and again from 10 to 12, and then immediately fell asleep again till 4 o'clock. But the sleep was very light, the patient hearing everything which took place about her. No nightmare. Nevertheless she felt on waking more refreshed than usual.

March 17. One gm. of trional at 6.30 o'clock. The same light sleep as before, from 8.30 till 11 o'clock, and again after an interval of a few minutes until 4.

March 18. One gm. of trional at 7 o'clock. Slept from 9 o'clock till 10.30, and again, after a brief interval, until 2 o'clock, but the sleep was very light, interrupted by frequent waking, and was followed by a sensation of fatigue.

March 19. Took one gm. trional at 7.30 o'clock. Slept from 9 o'clock till midnight, very quietly; and again from 12.30 until 4 o'clock, but during this latter period was very restless. Felt somewhat refreshed on waking.

March 20. The trional was stopped. Sleep continued to be broken in character. Never any unpleasant symptoms. The average amount of sleep obtained was about six hours, but it was light and very broken.

Case XXV. Catherine A., 42 years old, cyst of the ovary. For a long time the patient had not slept more than two hours each night.

April 23. Took one gm. of trional at 6.30 o'clock in the evening. Slept from 7 until 5 o'clock in the morning, quietly and without any interruptions. Awoke feeling comfortable and refreshed.

April 24. One gm. trional at 8.15 o'clock. Slept from 9.30 o'clock till midnight. Fell asleep again, waking for a few minutes, towards 3 o'clock, after which she slept continuously until 6 o'clock, well rested. The use of trional was continued for eight days longer at the same dose period. The average result was eight hours of quiet sleep. After the drug was stopped the patient slept a little longer than she had previously.

Case XXVI. Amelia A., 18 years old, florist, chlorosis with phlegmasia alba dolens of the right leg. Has slept about half an hour each night for about a month, and is very restless during the rest of the night. At the first trial, with one gm. trional, she slept eight hours the first night and two hours on the succeeding ones. At the second trial, March 13, she took one gm. of trional at 7 o'clock in the evening. Beginning five hours later she had six hours of

continuous sleep, without nightmare and was much refreshed on waking.

March 14. One gm. of trional at 7 o'clock. Fall asleep two hours later for five hours.

March 14 to March 17, an average sleep of five hours.

March 17. One gm. of trional at 6 o'clock. Two hours later she slept for three hours, the sleep being restless. There was drowsiness and hebitude on waking, which passed off during the day.

March 18. At the patients' request, the trional was replaced by the same dose of sulfonal, taken at 6.30 o'clock. She slept from 9 o'clock till 1.30, and again from 3 o'clock till 6, the sleep being quiet, refreshing and not followed by heaviness in the head. The same results were obtained on March 19, and subsequent days. The average sleep being about nine hours, and coming on two and one-half to three hours after the administration of the drug period. Sulfonal, in this case, proved to be superior to trional, which only gave an average of five hours' sleep. There was not much difference in the rapidity of the action, sleep coming on two hours after the trional, and two and one-half hours after the sulfonal.

Case XXVII. Alphonsine A., housewife, 61 years old, cancer of the stomach. Can hardly be said to sleep at all during the night. From time to time has a nap of a few minutes.

March 18. One gm. of trional at 7 o'clock. Slept from 7.30 till 10 o'clock, and again from 11 o'clock till 3, the sleep being sound, without nightmare.

March 19. One gm. of trional at 7 o'clock. Slept from 7.30 till 10.30, and again from 11 to 5 o'clock, waking, however, several times. On waking the patient was much refreshed, felt better and was more hungry than she had been for a long time. During the night she perspired profusely, which had not occurred previously.

On six other days the same results were observed, the mean duration of sleep being seven hours. No unpleasant symptoms, except the unaccustomed perspirations. The trional seemed to have a good effect upon the appetite.

7. INSOMNIA IN DYSPEPTIC PATIENTS.

Case XXVIII. Louise L., housewife, 34 years old, dilatation of the stomach. For the past six weeks has only had one or two hours' sleep each night, and this has been broken by nightmare. From April 6, till April 11 took one gramme trional each evening at seven o'clock. Falls asleep towards nine o'clock, on an average, and sleeps till midnight. Does not rest well, and has more severe headache than before the administration of the trional. Has profuse night sweats, which were not present previosly. No influence on the gastric condition.

Case XXIX. N., thirty-five years old, dilatation of the stomach. Has only two or three hours of heavy sleep, interrupted by nightmare. May 20 took one gramme of trional at half past seven. From eight o'clock till five, had a sound and quiet sleep, without nightmare, and awoke feeling very much refreshed. May 21, took one gramme of trional at eight o'clock, and slept very well from half past eight till half past four o'clock. May 22, took no trional and did not sleep. From May 22 to May 28, took one gramme of trional each evening, and, after an average interval of half an hour, sleep came on, lasting six or seven hours. No bad symptoms.

8. INSOMNIA IN A MORPHINE HABITUE.

Case XXX. Renee L., 22 years old, morphine habitue. Has been in the habit of taking daily twelve Pravaz syringefuls of 1-40 solution of morphine. The patient is extremely emaciated, vomits frequently, has palpitation and profuse sweating. Menses are regular, but very scanty. She came to the hospital on March 8, having already taken eight syringefuls during the day. She was given two more during the evening of a solution of 1-50.

March 9, she received injections of four syringefuls of 1-50, with one gramme of trional after the evening hypodermic. One hour later had a

sleep lasting six hours. Pulse, 80.

March 10, four syringefuls of 1-50 and one gramme of trional. After two hours slept well for six hours, without nightmare. Pulse, 76.

March 11. Three syringefuls of 1-50 and one 1-100, with one gram of trional. After an interval of five hours, had a quiet sleep lasting six hours. Pulse, 82.

March 12. The same dosage. Nine hours of calm and refreshing sleep coming on one hour after.

March 13. Three syringefuls of morphine, 1-50, and one gramme of trional. One hour later slept for eight hours.

March 14. The same dosage. Two hours later slept for nine hours.

March 15. The patient asked for an increase in the quantity of trional to make up for the diminution of the morphine. The dose was raised to one and one-half grammes. She was more restless than on the previous nights.

March 16. The same dose of trional was increased to two grammes, and one of the hypodermic injections was made, with a solution of only 1-100. One hour later the patient had a very good sleep, lasting about ten hours. No discomfort on waking.

March 17. The same doses were given with the same result.

March 18. Two and one-half syringefuls of 1-100 solution of morphine and two grammes of trional at half past eight o'clock. Slept from nine o'clock until six in the morning, but woke frequently.

From March 19 to March 23, patient menstruated normally, except that the flow was not very abundant. The medication was continued as before, with an average result of seven hours' sleep, coming on one and one-quarter hours after taking the drug.

March 24. The injections were reduced to only two of morphine, 1-100, with two grammes of trional at eight o'clock; slept quietly from nine o'clock until six.

March 25 and 26. The same result obtained.

March 27. The dose of trional was raised to two and one-half grammes.

From March 27 until April 20, when the patient voluntarily left the hospital, the same medication was continued, resulting in an average sleep of nine hours, coming on from one to one and one-half hours after taking the dose.

The urine was examined every day with reference to albumen, glucose and hematoporphyrine. Nothing abnormal was found at any time.

According to our observation, trional did not seem to check perspiration. No disturbance of any of the bodily functions was noted at any time during the treatment.

In all of these cases the urine was examined at frequent intervals and neither sugar nor albumen was found at any time, nor have they ever shown the dull red tinge which indicates the presence of hematoporphyrine.

The average amount of sleep obtained has been about seven hours, and it has followed after an interval of three-quarters of an hour to one hour after the administration of the drug, given in wafers and followed by a hot draught. The time required for the drug to act has, however, varied between the extremes of fifteen minutes and six hours. The patient is easily aroused from the sleep, but it is resumed immediately.

In some of the cases (Nos. 2, 4, 11, 12), trional has seemed to cause nightmare. Gaillard has also reported a case in which the patient refused to take it, on account of the frightful nightmare which it caused her. We observed one case of failure in a case of cardiac disease, with defective compensation (No. 6.), in which the insomnia yielded to morphine. In our two hysterical cases (Nos. 19 and 22), it had a quite marked sedative action. In four cases (Nos. 4, 7, 11, 21) there were some transitory disturbances on waking; nausea, headache, vertigo, uncertainty of gait and noises in the ears. In case 21, the headache was, however, persistent.

In case 15, trional was shown to be superior to chloral, sulfonal and opium; but in case 25, on the contrary, it was inferior to sulfonal given in the same dose. In two cases (Nos. 27 and 28), there was noted sweat-

ing, which had not been present previously, and for which there was no other explanation. In the first of these cases last mentioned, a very decided improvement occurred in the appetite.

In nearly all the cases, the temperature was taken in the evening, before the medicine was taken, and on waking in the morning. There was no difference that could be attributed to the drug. The pulse was taken every morning and showed no changes after trional. Neither have we observed any action upon the respiratory apparatus. A case of favorable influence upon the digestive organs was mentioned above, in addition to which we find note of a little diarrhea in case 3.

INDICATIONS FOR THE USE OF TRIONAL.

Trional is indicated in insomnias of every variety. It succeeds particularly well in those which are purely nervous, with little excitement; on the other hand, it is less efficacious when the sleeplessness is caused by a violent cough, as in a case of tuberculosis example. Its action is much more reliable in melancholia than in conditions of well-marked excitement. In delirium tremens it has seemed to give good results, although this opinion is not shared by all the authors. In morphinomania very good results have been obtained by it. In general paresis the results are less favorable. Speaking broadly, it may be said that trional is better suited to the cases of those who go to sleep with difficulty, than it is to those who find no trouble in getting to sleep, but who wake too easily. (Vogt.)

In surgical practice it is indicated in the insomnia of exhaustion from chronic surgical ailments, because it does not depress the heart action like chloral, or in the wakefulness, not associated with much pain, which is met with after operations. (Van Schaick.) However, we believe that pain is not a contra-indication for the use of trional, which often relieves, not the pain itself, but the condition of nervous hyper-excitation resulting from it.

It gives good results in the night terrors of childhood.

DOSAGE.

Trional may be administered in single or in divided doses:

1. In single doses—small doses, below one gramme usually give no result. Moderate doses, from one to two grammes, act chiefly as hypnotics in all cases of insomnia without too much excitement; but their sedative effect is not marked.

The method of Pelanda and Cainer seems very advisable. They recommend giving a dose of one and one-half to two grammes at the start, and then reducing the dose to one gramme on the following days, in order to keep up the hypnotic effect without any cumulative action. Large doses, from two to four grammes, should be reserved for conditions of violent excitement; their sedative action is especially pronounced.

2. In Divided Doses.—By giving wafers containing 50 centigrammes, two or three times per day, a pretty marked sedative effect is obtained, with relatively small doses, but without hypnotic action.

It is especially in such cases, and when trional is given for a long time continuously, that its use should be suspended at frequent intervals, and the freedom of the bowels assured, if necessary, by purgatives. As in the cases in which haematoporphyrinuria has appeared, the urine has always been found strongly acid, Professor Muller, of Gratz, advises that this symptom be met by the use of large doses of bicarbonate of soda. As a preventive measure, the alkaline mineral waters should be given along with the trional.

The dose of trional for women should be, on an average, 50 centigrammes less than that for a man, as it has been noticed that accidents are more common in their case.

The following, according to Claus, are the doses for children:

From one month to one year, 2 to 4 centigrammes.

From 1 year to 2 years, 4 to 8 centigrammes.

From 2 years to 6 years, 8 centigrammes to 1.2 grammes.

From 6 years to 10 years, 1.2 to 1.5 grammes.

When the insomnia is associated with pain, it is desirable to combine the trional with one centigramme of morphia, or two or three centigrammes of codeia, or perhaps, with phenacetine or acetanilide. Good results may thus be obtained which could not be secured by either drug alone.

METHODS OF ADMINISTRATION.

Trional may be given:

1. Suspended in cold milk, tea or mucilage.

2. In a hot liquid, such as milk, wine or punch, in which it is partly dissolved and partly held in suspension.

3. When the patients refuse liquids out of suspicious motives it may be mixed with finely divided food or with broth. In cases of children, it may be given in honey or sweetmeats.

4. By enema, the effect follows as promptly as when given by mouth.

But the best way is to give it in unleavened bread, followed immediately by a drink of 200 cc. of some hot liquid. This should be given about a quarter of an hour before bed time.

CONCLUSIONS.

1. Trional is a good hypnotic in mental disorders, as well as in the insomnias of miscellaneous origin. Its effect is produced in from three-quarters of an hour to one hour, and the average amount of sleep is about seven hours. The patient sleeps quietly, is easily aroused and falls asleep again promptly.

2. It seems to act upon the cerebral cortex, perhaps by inducing a condition of ischaemia.

3. It succeeds most uniformly in the insomnia attended by pain. When the pain is too severe, the addition of morphine or phenacetine will secure a good result.

4. It will be found to be less efficacious when there is condition of violent excitement, or when there is severe cough.

5. Compared with sulfonal and chloral, it seems to equal the former in effect and to be inferior to the latter; but it excels sulfonal in rapidity of action (it acts in from three-quarters to one hour), and has an advantage over chloral in that it does not set up a drug habit and that it is not depressing when given with any degree of caution.

6. It will, therefore, be particularly useful in those patients in whom chloral has lost its effect from long habituation, and in patients whose condition is already one of marked depression.

7. Small doses (1-2 grammes) seem hypnotic, chiefly, and large doses (2-4 grammes) sedative in cases showing excitement. Divided doses are also sedative in action. The former should, therefore, be given in all cases of insomnia without much excitement, and the latter when that condition is very pronounced.

8. Trional is not an analgesic.

9. At least, in therapeutic doses, it has no action upon the circulation, the respiration or the digestion. The secretions and the heat functions are only affected to an insignificant degree.

10. Slight symptoms of intoxication (vertigo, headache and unsteady gait) may follow the first dose, even though it be a small one (one gramme). Such symptoms usually pass away of themselves, and no not contra-indicate the use of trional, but merely call for care in its further administration.

NAVY DEPARTMENT, BUREAU OF MEDICINE AND SURGERY, WASHINGTON, D. C.

Changes in the Medical Corps of the U. S. Navy for the week ending November 30, 1895:

November 26.—Surgeon F. Anderson, detached from the Amphitrite and ordered to the Dolphin.

Surgeon P. M. Rixey, detached from the Dolphin and placed on waiting orders.

Surgeon J. E. Gardner, detached from Port Royal Station and ordered to the Amphitrite.

Passed Assistant Surgeon I. W. Kite, detached from the Franklin and ordered to the naval hospital, New York.

Passed Assistant Surgeon T. A. Berryhill, detached from the naval hospital, New York, and ordered to the Port Royal Naval Station.

A PRACTICAL STUDY OF THE BLOOD AND THE CIRCULATION, WITH A HISTORICAL REVIEW OF THE SUBJECT AND ITS BRIEF CONSIDERATION FROM THE STANDPOINT OF ITS CHEMICAL COMPOSITION, ANATOMICAL STRUCTURE, AND PHYSIOLOGY; INCLUDING CLINICAL STUDIES, AND EXPERIMENTAL RESEARCH ON THE LOWER ANIMAL.

BY THOMAS H. MANLEY, M. D., NEW YORK.

Continued from last number.

PART XIV.

THE VENOUS CAPILLARIES.

In structure and function there must be a difference in those capillaries which ramify through the skeletal structures, and those which course through the secreting or glandular organs. This is distinctly evident in the transparent, hyaline envelope of the pulmonary parenchyma of the reptalia.

The complexity becomes all the greater in the liver, where its main vascular supply is carried into it and from it by veins.

In the renal veins we observe the blood but slightly changed, and much the same color as the arterial.

As an artery finally breaks into capillaries it becomes thinned out so that nothing remains of the former tumics but the inner or endothelial layer.

Now, as we trace them into the venulae, we will find a reverse order of conditions; the terminal capillary as it advances towards the vein gradually undergoes a change in contour, in direction and in consistence; its course is less curved; its diameter widens, and we begin to notice that the quantity of basis substance between the elongated endothelial plates is in greater proportion. Still, as the primary muscularis of the venula is extremely delicate, the movement of the blood within it is readily seen, though on account of the deep tinge of carbon imparted to the corpuscles and plasma alike, these elements cannot be recognized. As we trace the capillaries on, in the direction of the large vein-trunks, it will be apparent that the movement of the blood becomes slower and slower as the larger tributaries converge into larger vessels. But it can be easily observed, as we examine different territories, that the rapidity of the venous current is not uniform; that in some places motion is nearly as rapid as in the arterioles; in others it is languid, while in others, again, there is an interrupted or irregular stasis. The former may be accounted for by a direct, abrupt anastomosis of an arteriole, with a venula; the blood making but an imperfect circuit. This feature of the capillary circulation was noted by Bernard and other physiologists, which led them to the conclusion that a considerable proportion of the blood passed directly from the larger radicles of the arteries to those of the veins, without making the full circuit of the systematic capillaries.

This arrangement of the vessels may be observed with great clearness in the peripheral vessels of the pulmonary parenchyma of the turtle, and, although on account of the density of the tissues and the amount of pigment present in the kidney and liver we have no ocular demonstration of its existence, there are good reasons for believing that it must exist over large areas in the renal structures.

THE AVASCULAR ELEMENTS AND STRUCTURES.

It is well known that, in infancy, childhood and youth, nearly all the tissues are highly vascular, and though it has never been determined, it is highly probable that, for the weight of the body, the relative proportion of the blood in the body is greater in adult life, and much greater at this epoch than after senile changes set in.

As differentiation of tissue in the course of development occurs, and growth is advancing, the demand for greater nutritive activity becomes manifest.

In the youth, the bone-marrow is of a red color, and highly vascular, the cancelous elements predominate

in the bone shafts, the peritoneum is thick, elastic and vascular; the whole frame-work of the body is pliant, and the organic elements are in excess in the solid structures. For some years after the period of full development is attained (usually about 20 years) a fair equilibrium is preserved, when physiological decay begins to become evident, and degenerative changes, so-called, appear. Now at 40 or 45 (though often earlier) vascularity of certain regions and organs begins to steadily diminish; the hair and teeth fall out, the skin atrophies in the lower extremities, the bones harden, the Haversian system is absorbed and the cavities become filled with an oily, yellow marrow.

If the compact cylinder of a bone shaft of an old man is as hard as ivory, its central bone corpuscles and their canaliculi have disappeared, and its feeble, vascular supply is from the periphery and the medullary membrane. Anatomically it is quite avascular. Physiologically, it is well-known that terminal elements readily undergo full transformation. Pathologically, in the aged, we may witness a similar change in the various structures. Tissue metabolism is defective, the interstitial blood vessels have undergone organic changes with embolic, thrombotic, or calcareous obliteration; in consequence of which the impoverished epithelial elements take on fatty degeneration in the evolution of their final total destruction. The ataxia of those advanced in years point to malnutrition of the nerves, the want of mental equipoise, to a lagging of the cerebral circulation. The condensation and firm setting of the osseous structures, leading to compression and narrowing in their vascular foramina and canals which come through them and lead to a final atrophy of the soft parts overlying them; as we may often notice in various situations, particularly the lower jaw, where in some, though the teeth may yet retain their hold in the sockets, the velvety vascular gums sink farther away from the crowns which loosen and fall out through want of this support. The only osseous structure in the body which escapes those degenerative changes of advancing years is the petrous portion of the temporal bone; without which provision of the economy the special sense of hearing would certainly be early lost.

Avascularity or diminished vascularity, then, is a physiologic condition through which nature prepares the body for that gradual descent back to the elements from which it came.

Our general conception of the circulation is that it everywhere permeates the tissues of the body, and that no tissue can survive without being freely penetrated by the capillaries; but this is certainly a mistake, as may be demonstrated as well in the living as in dead tissues. Besides the tendons, ligaments, cartilage and cornea, all the epithelial tissues are devoid of blood vessels; the same may be said of the endothelia which lines the vascular system and serous-membranes. The whole epithelial investment of all of the canals, the integument, the hair and nails, which are derivatives of the epithelia, are all devoid of a direct blood supply.

The blood courses fully through the loose lymphoid or cellular tissues, which is interspersed between the simple racemose and acinous tubules of the gland elements, but through the imbricated walls of the secreting cells it cannot pass. The interstitial elements, i. e., the connective tissue frame-work of smooth and striped muscles, conduct and support the fine blood vessels which in great numbers abound; but through the perimysium they do not enter; the spindles and basis substance of involuntary muscle and the striated tributes of voluntary muscles; receiving their vascular supply only after it has penetrated the protoplasmic corpuscles by inhibition or osmosis.

Diminished vascularity or avascularity, of various elements or organs, is an interesting study, to which attention must be directed in order to enable us to get more light on that deranged state of nutrition known as inflammation, the essential process of which yet remains a mystery. From the earliest beginning of studies bearing on this state, pathologists have almost invariably associated its phenomena with vascular disturbances, or

derangements of the circulation; but new facts are coming to light that point to the erroneous premises on which this view has been maintained.

Swift and destructive inflammation we will sometimes see in the avascular cornea. Endarteritis, pathologic and senile, we will often encounter, yet we know that the endothelia of the arteries are destitute of blood vessels. The calcified, brittle, non-vascular bone shaft of an old man will take on active inflammatory changes after fracture, throwing out an abundant ossific deposit, and thus welding the fragments together nearly as rapidly as the succulent, highly vascular shaft of a youth.

Relative and positive avascularity, as it will be later attempted to demonstrate, exercises an important influence on many deranged, physiologic conditions, and will explain many puzzling features in the course of regenerative and degenerative actions.

(To be continued.)

Society Reports.

CLEVELAND MEDICAL SOCIETY.

Regular Meeting, October 11, 1895.

THE PRESIDENT, DR. WILLIAM E. WIRT, IN THE CHAIR.

Dr. John M. Ingersol was elected to membership.

REPORT OF CASES AND EXHIBITION OF SPECIMENS.

Dr. Hamann: I have several specimens that are interesting from the point of view of the surgical pathologist, and I shall take the liberty of presenting them.

One of fracture of the neck of the femur in which union has taken place through the medium of fibrous tissue. The specimen is without history. There is considerable atrophy of the neck of the bone. The fibrous tissue can be very plainly seen between the head and the remaining portion of the neck.

The second specimen is one which was kindly presented to me by Dr. MeLean, of Elyria, O. It was taken from a case of tertiary syphilis. It shows the worm-eaten appearance. Multiple fractures had occurred. I think this bone had been broken two or three times. There is some union by means of fibrous tissue. It is interesting from an anatomical point of view as it illustrates the third trochanter.

The last specimen is one taken from a dissecting room subject, and I had an opportunity of seeing the arm before it was macerated. There has evidently been a fracture of the internal condyle and this part of the bone has been displaced upward. This arm presented the typical "gunstock" deformity when the soft parts were in place. There is an illustration of this in the last edition of Hamilton's "Fractures and Dislocations."

Dr. W. J. Scott: How reduce that dislocation?

Dr. Hamann: If I understood Dr. Scott it was, how proceed to reduce the dislocation of the condyle. To overcome the deformity, Allis suggested treatment in the extended position. By putting it in the extended position reduction was said to be accomplished. I do not know that there is any special method of overcoming the deformity. The displacement, one would naturally think, would be downward, owing to the action of the flexor muscles arising from the internal condyle. Such is not the case, however. I do not know of any well adapted method of retaining the fragments in accurate apposition.

Programme of the evening was opened by an address on "Headache," by Dr. A. R. Baker.

DISCUSSION.

Dr. Knowlton: I have been troubled a good many times with these

cases and have occasionally unloaded them onto the ophthalmologists and specialists on nervous diseases. Sometimes they have come back to me benefited and sometimes they continued to worry me greatly. I have no doubt but that there is a vast deal of truth in what Dr. Baker has said. I have seen a number of cases that have been greatly benefited and some entirely relieved by the use of glasses. I am inclined to the belief that many of these cases of migraine sick headache have their origin in disorders of digestion and malassimilation, and I think that sometimes treatment rather supports that view. For instance, we pay strict attention to the diet and to the improvement of the general health, and we often find a great deal of improvement in cases where the eyes have not been used to excess. I can recall many cases, in the country, for instance, farmers' wives whose occupations from day to day would be about the same, and where the eyes would not be strained, yet these periodical headaches returned, and in some of those cases it is highly improbable that the trouble resulted from error of refraction.

I think there is something in the ideas as presented by Dr. Rachford, of Cincinnati, in a recent article on "Leucomain Poisoning," in which he details some experiments in nervous and epileptoid attacks and his method of treating these cases has resulted very satisfactorily. I am inclined to think that we have quite a large precentage of chronic cases of migraine that are due to faults of digestion.

Dr. Scott: I agree with Dr. Knowlton's opinion about many of these cases. I used to live in a very malarial country, and have seen those intermittent neuralgias coming once a day, or every other day, or every third day, and spectacles would not help them a speck. Good square doses of quinine in a little while would improve the general health, and this class of headaches would be removed at once. And so with children in school. You notice that almost always before they get the eye trouble they have some trouble with digestion. They become pale and anemic. They are worried by lessons and the dread of examinations. If they are taken out before accommodation is seriously interfered with, or before the eye-strain has begun, they would get well without glasses. I think that I have seen this frequently in little girls. Take them out of school. Their general health is worth more to them than the schooling they get under such circumstances. After they stay out of school a while their headache is gone whether they use glasses or not; and so I think it would be better to improve the general health under such conditions rather than to depend on the application of glasses and let them keep on going to school.

I agree with Dr. Baker that the general practitioner should become familiar enough with the ophthalmoscope to discover some of the influences of disease upon the eye. If he find the veins much enlarged and the arteries small, then there is some fault somewhere in connection with the cerebral circulation. * * * Twenty years ago I commenced using the ophthalmoscope to my own satisfaction, and sometimes to the advantage of my patient. I have sent many cases to Dr. Baker, when I could not determine from my own experience, and yet there are cases that I can determine. * * * In many of these cases little experience will inform a man who observes the conditions that there is something wrong.

In cases where you have hemianopsia I could determine that with my slight experience—or possibly that he has a tumor somewhere, or some disease of the optic apparatus or optic nerve that produced this condition. * * * If he has been syphilitic, it would be a very important matter to determine whether it was a tumor, because strong, vigorous treatment may cure it. After it goes so long no treatment will cure it. That is an important matter. As a great many people have a little syphilis, this may be a very important subject for that class of people. If we were all able to use the ophthalmoscope a little I think it would be of great advantage

to the profession, as well as to the patient.

Dr. Baker: There is just one point that I wish to call attention to, and that is, that the amount of headache, the amount of pain, or amount of discomfort, such as we have from eyestrain, does not correspond to the amount of error of refraction. In fact, where we have a large error of refraction we do not usually have these painful symptoms. It is where we have a slight error that we are more apt to have headache and other troubles. The only explanation I have been able to give may be illustrated in this way. If we hold our arm out steadily all the time we cannot hold it very long; but we could take a heavy ax and swing it all day long without much effort. A person who has a large error of refraction gives up and does not try to see distinctly; but the person who has a little error of refraction, keeps his eye toned up to that point he sees well. He makes a constant effort, and headache and other reflex troubles result.

SOME UNUSUAL CASES IN OBSTETRICS.

Dr. Powell: I was called upon at a late day by the secretary and asked to help fill up the programme of the evening with report of a few cases. I determined last night to select from recent cases of interest three in which I performed craniotomy. The selection of craniotomy cases was chosen simply because in these latter days we hear very little about the operation; almost as if it had gone to oblivion; very little is heard of craniotomy. Within a year I think I have had as many as usual to perform for one cause or another, and I am under the impression that these operations have been judicious, and if I am wrong, this is a very good place to be corrected.

In connection with these three cases of craniotomy possibly I might say a word in order to bring out a little discussion, if some of you have not already decided on points you are going to take issue with me.

With reference to the case of hydrocephalus, as a matter of course the thing to do was to perforate; that will not be questioned; there was no alternative.

With reference to the case of twins and the unusual condition of this locking of heads about the brim, even here, had both heads presented in this contracted pelvis the first one would have been prevented from getting over and becoming fixed, although time sufficient had been given. After examination had proved that this was the difficulty, I think it was impossible to deliver these children without perforating. * * * If, however, one had living twins in that position, would the operation not be Cesarean section, with the present status of the operation and the proper surroundings? If such a condition could be found a little earlier, would not the operation of Cesarean section be justified? There would be nothing in such a case to prevent rescuing (?) the two children, and I can see that the woman might be in good condition for operation. Of course, the operation of symphysiotomy would give no assistance in such a condition as this. With this prolapsed cord ceasing to pulsate, of course the thing to do was craniotomy, and a most difficult thing under these conditions.

Aside from these comments, there is the possibility that some of you gentlemen may think that the cessation of the heart beat of this last case would not justify one in doing craniotomy, but would prefer symphysiotomy. * * * It must be remembered that forceps had been applied during the night, and that such cases are not favorable ones for symphysiotomy, whereas they are very favorable for craniotomy, so far as the woman is concerned.

I apprehend that there may be a diversity of opinion about these cases and shall be glad to have criticism.

DISCUSSION.

Dr. Campbell: It is a little hard to criticise without being on the ground and helping to diagnose the case. The first one, of course, there is no objection to. The second case, the twins, there is a question just how they were locked. By some manipu-

lation it might have been possible to turn one of them feet foremost. In the last case I would like to inquire just how large the head was, what the presentation was, and what the relation of the head to the brim of the pelvis, how much the head would have been pressed out of shape in being delivered, and also how much force was used in the attempt to use the forceps.

Dr. Friedman: A man who had had the case over 24 hours only under chloroform was able to decide it was hyprocephalus. I presume that he is aware that Prof. ——— is able to make a diagnosis at 8 1-2 or 9 months, and if I am correct in my memory, in only 9 cases out of 125 was the diagnosis incorrect. Now if this statement is true, it is a wonder why it took so long for the doctors to decide if this was hydrocephalus. I have had many cases of confinement in which I have never been able to make any diagnosis without direct examination.

F. S. Clark: I have been very much interested in the report of these cases. It seems to me it is a very fine point to decide whether a man should do craniotomy on a living child, or symphysiotomy, or Cesarean section; but it seems to me when the child is dead, under any circumstances craniotomy is to be preferred to a high forceps delivery, and better than high forceps where the head is not engaged, because we have then only the mother to think of. Under these circumstances the danger to the mother is greater during a high forceps delivery than during a craniotomy, because there is greater danger of tearing the parts than to deliver a diminished head with the cranioclast. * * * It was never thought of doing a high forceps delivery on a dead child. And craniotomy gives the least danger to the mother.

In the case of the twins, the question came up in my mind just how much the lessening the diameter of the head by perforation was going to relieve the locking. If the child were dead, we would not think of symphysiotomy or Cesarean section.

Dr. Tuckerman: There is one point in the relation of a living and dead child to a labor, and that is the aid which the live child constantly renders to its own delivery. You place your finger on the head and you will find the living child is twisting its head around and around to find the easiest place for its head, and the easiest place for its head is always the way out. We have always noticed this. But one of the obstructions to the delivery of a dead child is the fact that the child cannot help itself in that way. I think the doctor's position is correct, that with a dead child craniotomy is the easiest way out.

Dr. Sawyer: I do not know that I have anything different to offer. The fact of craniotomy being applicable to dead children is received everywhere; the question is whether craniotomy on living children should be performed. That, of course, depends upon circumstances. If the operator is at hand I think that statistics show that Cesarean section is more desirable than craniotomy, but craniotomy can certainly be performed by men who would hesitate to undertake Cesarean section. It can be done without injury to the mother, recognizing, of course, that there is not such a degree of traction as to render the operation inadvisable.

In regard to the active efforts of the child being made, I would suppose that was very largely dependent on the degree of contraction of the womb; and I do not know that the turning of the head here and there is any result of the child's efforts to free itself from its present situation. I do not know that I have anything new to offer. It seems to me the whole discussion of craniotomy turns on whether the child is living or dead. Where one might be competent to do craniotomy, he would not feel himself competent to do Cesarean section. I do not know that there is any criticism to make on the cases of Dr. Powell. He does not say whether he made any effort to ascertain whether the child were dead or living until he introduced his hand. All that is a matter, perhaps, of each one's individual notions, but it would seem to me it would have been entirely proper for him to have

made an external examination to discover the condition of the circulation of the child, and quite possibly he might have discovered the fact that there were two children instead of one if he had made a careful external examination.

Dr. Powell: Relative to this question of the influence that the death of the child has upon labor. It is pretty well recognized that there is an influence. There is less tonicity to a dead child. A living child, by its tonicity, aids delivery, and also by its movements incites action of the womb.

The point suggested by Dr. Campbell, as to whether twins could not be turned. I doubt whether the doctor really meant that. You cannot do very much in turning twins, especially with the heads locked. * It must be remembered that these were not the classical locked twins. There the locking is in the true pelvis—here the locking, as we call it, was above the brim, and so firm (?) as to make it utterly impossible to move that head to the brim, and then the prolapsed chord settled the matter, so far as that child was concerned, and made perforation the only hope of getting the second child alive.

With reference to the diagnosis, I will state that Dr. Mabley said to me that he thought it was possible that he had twins there a day or two before, believing he had heard two fetal hearts. We made careful examination at the time of operation, but the relations had very much changed. With the labor pains things are very much mixed, so that it is not always an easy matter to determine twins. Twins are generally a surprise to everybody, although I have diagnosed twins a little while before confinement.

With reference to the position of the head in the last case, it must be remembered that attempts at delivery had been made at various times through the night. Forceps had been applied by a pretty strong man. The head was in the first position, but had made no progress in entering the brim. It was fixed by the tonicity of the womb. I made all the efforts with my forceps that were justified after that history.

The Times and Register.

Weekly Journal of Medicine and Surgery.

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IS THE BACTERIOLOGICAL THEORY OF DISEASE WANING?

It is an old saying that "every dog has his day," and it seems to be equally true of medical theories. We have observed during the past year that much has been said by the most eminent of authorities tending to express doubt as to the invulnerability of the germ doctrine as the sole cause of disease. The ultra germ theorists are dropping out of sight and allowing the more rational facts of cli-

matic and atmospheric changes as producers of disease full sway in the theories of the present day.

It was not long since a simple catarrhal inflammation of the nasal passages, commonly called a "cold," was considered the result of bacillary invasion. We now are called upon to consider the influences exerted by draughts, sudden changes in atmospheric temperature and other unhygienic conditions, reverting to the former days when these surrounding elements were looked upon as the sole authors of disease.

But our forefathers were not always so far out of the way in their reasoning, and there were no greater fools in a century back than sometimes exhibit themeslves at the present time. The one great failing with the individual members of the profession of the nineteenth century is the inordinate desire for notoriety and the consequent tendency it exerts for rushing forward with every new theory until it becomes a veritable fad.

Fads are often instructive and usually safe enough if not carried to excesses. So it is with the germ doctrine. We have bacilli and bacilli—innumerable quantities of them—growing in such situations as best support them by favorable environments. Probably many of them produce toxines. Undoubtedly many are harmless. Possibly some may even be termed curative by their antagonism for those that are virulent. But all this does not refute the fact that the bacillus, of whatever genus he may be, cannot find in the purely healthy human blood cell a favorable field for his cultivation and growth. That must be sought for in the degenerated corpuscle.

We must study then the various causes which influence the degeneration of the blood cell if we would get at the real prime mover in etiology. These are undoubtedly more or less controlled by the sensory nerves acting through outside stimuli and explains vastly better how the production of a "cold" may arise from draughts, bad air and warm winter storms.

It is, however, among the contagious diseases that the claims of the germ theory seems to have its strongest hold for recognition; but when one stops to think that pure air and thoroughly oxygenated blood are the best preventives for contagious diseases, it will be readily understood how we may find specific germs early in a given disease without their proving more than symptomatic phenomena.

THE RECTUM AND THE SPECIALISTS.

In a late issue of the New York Medical Record a most interesting and timely contribution appears from the pen of Dr. Charles B. Kelsey, in which he takes a most dolorous view of the future of the rectal specialist; or, as he quaintly styles him, the "Pile Doctor." No, the members of the American Medical Association have some faint shadow of common sense left, and will not give the rectotomists a section to themselves. It is true, as Dr. Kelsey says, that we have a quarterly journal, presumably devoted to rectal surgery; but the founder has deemed it advisable to extend its domain further up, to the large, small intestine, the gall bladder and stomach. But it is a periodical of above the average merit, well written and ably edited. If there be room for treatises on the rectum, why not journals? We are and have been overdoing specialties, and those who "sowed the wind are now reaping the whirlwind." The wail is raised that we have too many rectal specialists; but what do those mean, who themselves profess to practice and teach nothing else, than the lesions occupying the anal opening in the buttocks, and advertise for students to come, qualify and put up their cash?

It will be admitted that "six weeks" is rather short time to turn out a full-fledged specialist on the rectum, but let it not be lost sight of that to those who come from the far West, with their loss of time, transportation and other expenses, it means a considerable outlay; and then, after all, are they not specially trained, or why so certify on their

diplomas? As a matter of fact, he, who attends daily on a "rectal clinic" and cannot master the technique of the operations for piles, fistulas and fissures, never will. He, however, is a dangerous character to let loose on the community, for the reason that he is liable to mistake consequences for causes. The truth is that he who would most successfully master the treatment of ano-rectal diseases must be a good all-around surgeon, who will not hesitate to excise the sacrum or perform any of the operations on the pelvic organs or genito-urinary organs of the female. In such hands we agree with Dr. Kelsey and a patient is safe who has diseases in the lower intestine. Let us have the trained surgeon first, and the rectal specialist next; and if it be desirable to reduce the number of rectal specialists and "orificial surgeons," demand of them before they enter your portals for study their passport, showing that they have the former qualifications.

In the present condition of things, when the medical colleges, like the railroads, are consolidating their forces and threaten to extinguish the general practitioner by an excess of hospitals and free dispensaries, in their despair and desperation, they turn to specialties, some of which are regarded little better than are other forms of respectable quackery.

If "special courses," which are everywhere advertised and placarded, are not operated to make specialists, then, in heaven's name, for what are they?

Come, let us be honest about this matter, for it is time that the fashionable city specialist should be frank and tell his audience, more humbly placed in a far-off village many are, that they misunderstood him and are laboring under a misapprehension, and that the only course to success in his line is over the long, tortuous course of a five or ten-year apprenticeship in general surgery. Our leading gynecologists have not always been original or great surgeons, though the world over, capable surgeons must of necessity be gynecologists, or, in other words, master the mechanism of technique of any sanguineous operation whereever located.

Happily, with the curriculum now in force in most medical colleges, it looks as though a medical degree in America would mean something, and specialists hereafter will have to make way for a class of practitioners ready to successfully cope with a large class of cases heretofore turned over to those in special branches.

Electro-Therapeutics.

IN CHARGE OF

DR. S. H. MONELL, Brooklyn, N. Y.

THE EFFECT OF FARADIC SEDATION IN LOCAL INFLAMMATION.

It used to be taught that electricity in any form was contraindicated in all cases of inflammation, and when it was announced that some new effects could be obtained by certain modifications of the well-known Faradic apparatus sedation, unloading of congested and inflamed tissues, lowering of temperature, etc., it was received with much doubt and approached with temerity. The wide discussion of coils, vibrators and other details of the new high-tension batteries, so familiar to those who have kept pace with the recent advances in electro-therapeutics, makes it unnecessary to more than allude to it in a brief record of observations coming within the scope of this paper. The writer will only say that the effects claimed by some observers, said to be obtained with coarse wire coils with few windings, and with the primary current, which are generally supposed to be possible only with long, fine wire coils, and very rapid vibrations, must, to the average reader, seem very misleading. With a liberal allowance for inaccuracies of observation as to the pathological conditions in the cases cited, some of the effects obtained can be explained in this way; that the long and continual use of any stimulation may, under certain conditions, produce sedation and reduce inflammation—

cold and heat are familiar examples. In our enthusiasm over a new-found remedy we are prone to forget that any one agent that is to become the panacea for all ills is not likely to be found. Electricity has its limitations as well as opium. We have, however, in the new high-tension apparatus a very useful agent, but one that needs very careful study, not only of the instrument itself, but of the conditions, physiological and pathological, to decide its appropriate use, and upon which success in its use most emphatically depends.

My own observations have been largely confined to gynecological cases, though many others have been observed and may be offered in another section of this paper. Case 1. Mrs. C——, age 25; was called on account of severe pain and vomiting; found great depression, temperature 103 degrees, severe pelvic pain, had been vomiting for several hours. Suspecting the cause to be pelvic, made examination under an anesthetic, as the patient could not be touched, so great was the pain and tenderness. The left ovary could not be mapped out on account of a large mass of exudation filling that side of the pelvis, and crowding the uterus well over to the right side. There was evidence of an old endometritis, and the conclusion was that we had a case of parametritis of probable septic origin, and that the pain and vomiting was caused by pressure upon the ovary from the adhesions and exudation. A bipolar electrode (modified from the well-known Apostoli electrode), with bifurcated cord, and connected with positive pole of a high-tension Faradic battery, was introduced per vaginam, and a suitable pad, 6 by 6 inches, placed over the solar plexus, and with single cord attached to the negative pole. It may be well to state in this connection that the secondary coil used was composed of 1541 yards of No. 36 wire, that the primary was excited by six chlorid ammonium Sampson cells (these cells have a high ampereage), controlled by a rheostat in the battery circuit, and the vibration was capable of very fine adjustment and very rapid vibrations. A seance of twenty minutes was given, affording great relief from pain and entire cessation of vomiting, and lowering the temperature to 101 degrees. The applications were repeated every two to six hours, as indicated, for two days, resulting in such amelioration of all the symptoms that the patient became entirely comfortable and free from pain except when an effort was made to move about. Temperature normal; no vomiting. Applications were continued twice daily for ten days, when galvanism was employed to remove the exudation by electrolysis. It is only fair to say, however, that the Faradic current was continued daily, and no doubt contributed materially to the ultimate removal of all the adhesions and exudation, restoring to health a case which ordinarily would be considered a subject for a hysterectomy, as soon as the patient could be got in a condition for operation.

Case 2. Miss R——, age 40; applied for relief from severe pain in left iliac region; temperature 102 degrees; gave history of soreness and inclination to stoop with pain when an attempt was made to stand erect. For twelve hours previous to being seen (June 4, 1895) pain had been severe, which was only partially relieved by 1-4 grain morphia. Examination per vaginam showed great tenderness—could not allow any pressure over left iliac region. The left fallopian tube was enlarged and very painful, a hard exudation filling Douglass cul-de-sac, and also above the bladder, the latter causing great pain when the urine was voided. The diagnosis was pyosalpinx, with parauterine inflammation. Bipolar faradization was given for thirty minutes, with great relief from pain and reduction of temperature to 99 2-10 degrees. The patient slept two hours, and upon awakening complained of only a partial return of pain; temperature 100 degrees. The application was repeated, and again followed by relief of pain and lowering of temperature to 99 degrees, and a longer period of comparative comfort. Treatment continued every four hours for two days. By this time active inflammation had subsided, and nega-

tive electrolysis was employed to evacuate the tube into the uterus. This measure proved successful, the patient reporting next day a discharge of two or three ounces of thin pus per vaginam, and an examination proved that the tube had been evacuated. The faradization was continued every other day, which, with appropriate galvanism, disposed of the exudation and adhesions. Curetting was advised, with the view of disposing of the endometritis, facilitating drainage of the tube to prevent a recurrence. This the patient has so far declined to do.

Case 3. Mrs. N———, aged 24. When first seen patient complained of severe pain in the head and back; pulse, 120; temperature 104 degrees. Gave history of occasional dysmenorrhea, and, as her menstrual period was then due, it was apparent that the cause of her suffering was due to extreme congestion. Hot vaginal douches were ordered, and pot. bromide, followed by morphia. After four hours with no relief, bipolar faradization was resorted to, with considerable diminution of pain; repeated in two hours, with the effect of bringing on the menstrual flow and complete subsidence of all pain, abnormal temperature and nervous distress. The usual period for these applications is fifteen minutes, governed, however, by circumstances, of which the attendant must be the judge in each particular case. Points for consideration are the pathological conditions present; what is desired to be accomplished; frequency of applications, and a thorough conception of the power and limitations of the apparatus used. It is a great mistake for any one to expect uniform favorable results from the use of periodic currents, or, in fact, any form of electricity, till the principles of electrophysics are well understood, and for gynecological work the special training and experience which must constitute the equipment of a successful specialist should always include the other necessary attributes of a good physician.

O. S. PHELPS, M. D.,
New York.

TRANSLATIONS FROM

Foreign Exchanges.

BY DRS. CHANDLER AND DAVIDOW.

SHORT NOTICES FROM EVERYWHERE.

Professor H. Schmidt-Rimpler, in the Berliner Klinische Wocheuschrift, No. 45, has a lengthy article on the employment of powerful electro-magnets for the removal of splinters of iron and steel from various portions of the eye. The history of the operation dates back to the middle of the seventeenth century, when Fabry, of Hildenheim, recorded the first known case.

Hirschberg, in v. Graefe's Archiv. f. Augenheilkunde, Bd. 36, Heft 3, first brought the operation into prominence by detailing results in one hundred cases where he used the electro-magnet for removing iron particles from the eye. Professor Haab, in his paper read before the Congress of Ophthalmologists at Heidelberg, mentions one especially interesting case. By using the enormously-powerful Ruhmkorff electro-magnet of the physical institute of Zurich, he was able to draw an iron splinter from the vitreous to the interior chamber of the eye, whence its extraction was but a simple matter.

Professor Rimpler mentions and comments upon seven cases of his own where the electro-magnet was used, and draws the conclusion that it should be employed in all cases where the removal of iron particles is likely to be attended with any difficulty.

In the transactions of the Viennese Imperial Society of Medicine is a very remarkable case, which was presented by Dr. Porges. In July, 1890, a patient came to him, who presented most indubitable symptoms of pyloric cancer. An operation was decided upon, and performed in August by Professor Mayal, who found the cancerous mass so extensive that he was obliged to resect nearly the totality of the stomach to insure its complete extirpation. A microscopical exami-

nation showed the cancer to be of the scirrhous variety. Up to the 18th of October, 1895, the patient had had absolutely no signs of any relapse, and had vastly improved, both in appearance and in general health. Before the operation he weighed only 56 kilos, and he now tipped the beam at 80 kilos.

Professor Kolisch (idem) discussed gout and its treatment. He first demonstrated that as long as the kidneys are unchanged the final products of the nuclein are eliminated in the form of uric acid. When the kidneys are affected the formation of uric acid is diminished, and the alloxuric bases (bases of the xanthin group) come in its place. Kolisch calls the combination of uric acid and alloxuric bases "the alloxuric substances." These are always in excess in the uric acid diathesis, this being caused especially by the increase of the bases which have an intense toxic influence on the kidneys, as K. has experimentally proved. Its clinical manifestations are what Neusser calls the perinuclear basophylic of the blood and the increased elimination of alloxuric substances in the urine. These substances are toxins which are at first destroyed by the kidneys, but which, in the long run, cause an alteration in the kidney itself. Part of these substances is eliminated under the form of base and the rest as uric acid. This renders clear the reason why different authors have found varying quantities of uric acid in gouty patients, since a part of the nuclein was eliminated as bases of the xanthins and not as uric acid.

As to the therapy, a specific treatment of gout is hardly possible, for there is no known remedy that will lessen the natural hyperproduction of the nuclein. Anything that would tend to increase it, as soups, beef extract, asparagus, fatigue, abuse of food or alcohol, must necessarily be avoided.

A simple and moderate diet, with moderate exercise, milk, starchy foods, fat meats and a few vegetables, is to be highly recommended.

We have received the first two numbers of the Independence Medicale, a weekly, launched by A. Maloine, the well-known publisher of medical books, in the Rue de l'Ecole de Medecine, in Paris. If it continues as it has commenced it will be in the front rank of the French medical journals. There is so much of interest in it that we scarcely know where to commence to cull. On page 14 there is an abridgement, one column in length, of Dr. W. R. Dunham's paper on "The Operative Principles of Medical and Biological Science," which appeared in the Times and Register of October 19.

Sawicky (Przeglad Chirugiczny, vol. 11, pt. 3) reports a case where the midwife mistook the breech of an infant for a vertex presentation. The child was delivered in a few hours with a ruptured perineum. One month later S. was consulted, for the child suffered from incontinence of urine and of excrement. Examination of patient showed a cystocele, cicatrization of the perineal tear with a vaginal opening and a slight prolapse of the rectum. The anus was wounded, the tear going as far as the external sphincter. Tait's operation was performed. The anterior portion did not heal, so the vulva remained gaping, while the posterior portion of the perineum and the anal ring took on their normal appearance. There was no longer any incontinence either of urine or of feces.

Perineal tears are of more frequent occurrence in breech presentation than is generally supposed, and is usually caused by the midwife mistaking the anus of the child for the mouth of the womb and dilating it with the fingers.

Dr. Max Fleisch, of Frankfort (Berliner Klin. Wochenschrift, No. 43) notes a very odd case of diphtheria of the skin. A little girl, who had been scalded on the neck, was kissed there by her mother while the latter was changing the bandages. The next day the mother complained of sore throat, which rapidly took on a diphtheritic character. Three other

members of the family also fell sick with the same disease, yet there were no throat symptoms in the child.

An edema of the skin and subjacent cellular tissues caused a microscopical examination of the serum to be made, and this was found full of colonies of diphtheritic bacilli.

CHANDLER.

THE THERAPEUTIC APPLICATION OF ZITTMANN'S DECOCTION IN SYPHILIS OF THE NERVOUS SYSTEM AND OTHER DISEASES.

A. Eremjew. Wopenno-Med. Shurnal, 5, '95.

Author received favorable results with the decoctum Zittmann's.

The dococtum is ordered in two forms:

1. Decoctum Zittmann's fortius: Radicis sarsaparillae concisae et contusae, 360.0; aquae communis,26 L. S.; sacchari alba et aluminis aa, 24.0; hydrargyri chlorati mitis, 24.0; cinnabaris preparatae, 8.0; coque ad colaturas libras cca, 9 1-2 liter; sul finem adde fructuum anisi sulg. contus, 15.0; tinct. feniculi cont, 15.0; tol. sennae, 90.0; rad. glycyrrhizae, 45.0; colaturae sint, 8.640 liter.

2. Decoctum Zittmann's mitius: Rad. sarsaparillae conc. 180.0; residui specierum e decocto fortiore; aquae communis, 26 lit. coque et colat. libr. 9 1-2 lit.; sul finem adde cortic fruct. citri., cort. cinamomii cossiae, fruct. cardamomi min., rad. glycyrrh. aa, 12.0; colaturae sind 8.640 liter. Frequently the senna was left out entirely.

Mornings each patient drank one pound (Russian—0.90) of the strong, and in the evening one pound of the weak decoction. On an average the treatment lasted one month, then a pause was taken, and if some symptoms still persisted, another similar treatment was given. The favorable results obtained from the decoction were not only in the disappearance of symptoms of the central nervous system, but the subjective symptoms improved visibly, appetite improved and the patients gained considerably in weight.

From the experience of the author it must be accepted that the action of the docoction is not due only to the mercury present, or the influence of the hot drinks, but more to be attributed to the plant elements, above all the sarsaparilla, which positively acts as a tonic, and assimilation is hastened.

Author enumerates cases to illustrate his conclusions.

ANATOMO-PATHOLOGICAL CHANGES IN THE BRAIN IN CHOLERA ASIATICA.

F. Tschistowitsch. Wratch, No. 22,'95.

Pieces of brain substance hardened in Miller's fluid showed unmistakable changes. The nerve cells slightly edematous, some cell-nucleus absorbed, their chromatin resulting in an indistinct contour, until some of the nucleus cannot be detected at all. The nerve fibrills and neuroglia have hardly any changes. The small arteries, veins and capillaries are overfilled with blood, the perivascular lymphatic spaces widened and contained granules of pigment and extravascular blood, which was mostly formed in the brain substance. The most striking changes are found in the frontal and paracential convolutions.

The following jubilees will be celebrated in Russia during the year 1896: October 8, 30-year activity of Prof. I. I. Bistrowa; 25 years activity, February 17, Professor K. H. Vinogadowa; February 9, Prof. H. A. Kruglewski; July 12, A. I. Danilewski, and July 6, M. D. Lawdowski.

At the annual meeting of the Russian Pirogoff Surgical Society, held May 17, Professors A. I. Jarenetzki and Yurlt were elected as honorary members.

The Moscow University resolved to take part in the international subscriptions for the bust of Prof. Leuckart.

The amount allowed for the twelfth International Medical Congress was reduced from 50,000 to 30,000 rubles.

In Redactor Shurnal Wratcha, Poluchil Nomera 43 i 44. Blagadaru.
A. D. D.

Miscellany.

ON THE TREATMENT OF CROUPOUS PNEUMONIA BY DIGITALIS.

Dr. Hans Naegeli-Akerblom, Ruti (St. Gallen) (Centralblatt f. innere Medicin, No. 32, August, 1895). The author quotes the experience of Professor Petrescu, who has obtained the best results in pneumonia from the free administration of digitalis in pneumonia, in doses of 1, 2 and 3 drachms, in the form of infusion. Petrescu calls this the therapeutic dose; but of 1192 cases treated thus in the Bucharest Military Hospital, the mortality in thirteen years varied from 1.2 to 2.6 per cent. The crisis generally occurred as early as the third day. These results are contrasted with those obtained by other methods; bleeding, expectant treatment, etc., and statistics are discussed at length. Akerblom points out that Petrescu's results are partly to be accounted for by the fact that his cases occurred in patients in early manhodd, who had further given proof of vigorous health and good physique before their admission to military service. The author saw the digitalis treatment extensively used in Professor Massini's Clinique, but other means were used in many of these cases—e. eg alcohol in large doses, cold compresses, wet packs, etc. After this he used digitalis largely in his own practice, and he tabulates his results from May, 1893, to May, 1895. Between the ages of 1 and 50 he had no death from simple, uncomplicated croupous pneumonia. He began treatment with digitalis to slow and regulate the pulse and to control the pulmonary circulation. Digitalis acts (1) by its action on the left ventricle, by constricting the capillaries; in the latter particular, in fact, by regulating the flow to and from the lung capillaries, acting very much in the same way as blood-letting. (2) By direct stimulation of the vagus it acts on respiration. The author is doubtful as to its antipyretic action. He quotes Jaksch's observation that leucocytes are increased in croupous pneumonia which runs a favorable course, and he therefore recommends the exhibition of antifebrin antipyrin or pilocarpin, to increase the leucocytes. Cold baths also (according to Winternitz) have this effect. This view is not shared, however, by Biegansky, though Carini, Chatenay and others support it. The author experimented on animals, and found that in healthy animals (and also in healthy men) digatilis increases leucocytosis. The conclusion he draws are as follows:

(1) Digitalis is one of our most valuable therapeutic agents in the treatment of pneumonia.

(2) It acts favorably on the heart, lungs and blood.

(3) Used in large doses it shortens the course of the disease.

(4) In large doses it is markedly useful in increasing the leucocytes, and especially by favoring polynucleation. Single doses of one gramme (16 grains) twice to four times daily may safely be given.

(5) The employment of cold water with the treatment by digitalis is very useful, and is a further means of promoting hyperleucocytosis.—London Practitioner.

SOME APPLICATIONS OF GUAIACOL.

From the London Practitioner.

Guaiacol, one of the ingredients of creosote, has lately been recommended as a local anesthetic. Blaise (Presse Med., April 10, 1895) and Lucas-Championniere (Bull. de l'Acad. de Med., July 30, and Pharm. Journ., Aug. 10, p. 134), recommend a solution of the drug in sterilized olive oil (1 in 10 or 1 in 20) as a local anesthetic, to be used like cocaine by hypodermic injection. For the removal of teeth, small tumors, etc., it was found that perfect anesthesia was obtained, and it is claimed that the anesthesia obtained by guaiacol is as perfect as that obtained by cocaine, whilst ten times as much of the for-

mer can be used without causing symptoms of poisoning. It remains to be seen whether these observations will be confirmed by other surgeons.

In gonorrheal orchitis the pain is readily relieved by the following formula:

R—Guaiacol ..... 1½ drams
Vaseline ..... 4 ounces

This should be applied three or four times a day in the inguinal region or on the internal surface of the thigh.

The External Application of Guaiacol.—Brill (Centralblatt fur innere Medicin, 1894, No. 47, p. 1097) has employed guaiacol by external application in four cases of pneumonia, five of typhoid fever, four of pulmonary tuberculosis, one of bronchitis and two of articular rheumatism. He found that the remedy in doses of from 23 to 45 minims could be relied upon energetically to reduce the temperature, although it also caused extremely unpleasant secondary manifestations. In eighteen other cases, principally of rheumatic character, the agent in doses of from 12 to 24 minims exercised an analgesic influence without unpleasant complications.

In the treatment of pleural effusion Segalea (La Medicine Moderne) has employed with success topical applications of guaiacol in the following formula:

Guaiacol ..... 36 minims
Tincture of Iodine..... ½ dram
Glycerine ..... ½ dram
M.

The applications are made by means of a brush to the entire posterior aspect of the chest, which is then covered with cotton and an impermeable dressing and a bandage.

In a case of anasarca, with anuria, consequent on scarlatina, in which other measures had failed, applications of the following combinations were soon followed by relief:

Guaiacol ..... 16 minims
Glycerine ..... ½ ounce
M.

CHANGES IN THE STAFF OF THE PHILADELPHIA HOSPITAL.

Dr. William B. Porter has resigned after twenty-five years, and Dr. Alfred C. Wood has been appointed as his successor; Dr. J. C. DaCosta has been appointed surgeon, and Dr. E. B. Sangree, pathologist. Dr. Copeland, who was formerly pathologist, has accepted a chair in the Vanderbilt University, at Nashville.

KEIL'S MEDICAL, PHARMACEUTICAL AND DENTAL DIRECTORY.

George Keil, editor, Philadelphia, announces the early publication (fourth edition) of Keil's Medical, Pharmaceutical and Dental Register-Directory and Intelligencer, for Pennsylvania, New York, New Jersey, Maryland, Delaware and District of Columbia. Its list of national colleges, State hospitals, homes, dispensaries, societies and post office addresses of physicians, druggists and dentists, school of graduation and year, all the latest laws in these States, will be complete to date of issue, as a personal canvass will be made for data. It is the only Directory published for above-named States, registering graduates of all schools, physicians, druggists and dentists, and imparting all information needed by the professions mentioned in their daily practice. No effort will be spared to make the Directory complete, and the information accurate and reliable in the minutest detail belonging to the domain of medical, pharmaceutical and dental professions. An experience of thirty years is a sufficient guarantee that all subjects will be properly treated in Keil's Directory. The names in large cities, in addition to being in alphabetical order, will be numerically arranged by streets; also an alphabetical list of names of the whole Directory, giving the page of each; these features will no doubt be appreciated.